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EXAMINER

SHELEHEDA, JAMES R

ART UNIT	PAPER NUMBER
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2617

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/700,610

Applicant(s)

NISHIO ET AL.

Examiner

James Sheleheda

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-24 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maissel et al. (Maissel) (WO 99/01984) (of record) in view of Aras et al. (Aras) (5,872,588).

As to claim 1, while Maissel discloses a transmitting apparatus for providing digital content (Fig. 8B, headend, 340; page 30, lines 20-27), comprising:

meta information storing means for storing meta information about data that is transmitted (Fig. 8B, headend, 340 containing EPG program schedule information to be customized; page 29, lines 3-9 and page 16, lines 24-31);

meta information schema storing means for storing a meta information schema that defines the data structure of meta information about the content that is transmitted (default EPG data before customization at a user site; page 20, lines 19-31, page 21, lines 1-5 and page 30, lines 20-27);

inference rule storing means for storing an inference rule defined by the data structure of meta information about the content data that is transmitted (inference rules

based upon the user profile to customize EPG data; page 27, lines 28-31, page 28, lines 1-11 and page 30, lines 20-27); and

transmitting means for transmitting the meta information, the meta information schema, the inference rule, and the content data through a transmission path (transmitting the program guide data with the television programming; page 16, lines 12-17), he fails to specifically disclose identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data.

In an analogous art, Aras discloses a content distribution system (Fig. 1; column 4, lines 41-57) wherein content identifiers associated with particular programs are transmitted with the content (column 7, lines 31-67) to be used to identify the specific programming the user has watched (column 12, lines 40-45) for the typical benefit of providing a means to gather information which can be used for advertisers to more accurately target commercials to subscribers (column 12, line 65-column 13, line 6).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data, as taught by Aras, for the typical benefit of providing a means to gather information which can be used for advertisers to more accurately target commercials to subscribers.

As to claim 2, while Maissel discloses a transmitting apparatus for providing digital content (Fig. 8B, headend, 340), comprising:

meta information storing means for storing meta information about content data that is transmitted (Fig. 8B, headend, 340 containing EPG program schedule information to be customized; page 29, lines 3-9 and page 16, lines 24-31);

meta information schema storing means for storing a meta information schema that defines the data structure of meta information about the content data that is transmitted (default EPG data before customization at a user site; page 20, lines 19-31 and page 21, lines 1-5);

transmitting means for transmitting the meta information, the meta information schema, and the content data through a transmission path (transmitting the program guide data with the television programming; page 16, lines 12-17).

communication controlling means for communicating with a receiving apparatus, (page 28, lines 25-30); and

changing means for changing the structure of the meta information schema that has been stored said meta information schema storing means and the meta information that has been stored in said meta information storing means corresponding to content data that has been received through said communication controlling means (preparing customized EPG data for a particular site based upon a received profile; page 28, lines 17-24 and page 29, lines 1-9), he fails to specifically disclose identifier data storing means for storing identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data.

In an analogous art, Aras discloses a content distribution system (Fig. 1; column 4, lines 41-57) wherein content identifiers associated with particular programs (column

7, lines 31-67) are stored and transmitted with the content (wherein the AVI identifiers must inherently be stored in some form to be repeatedly inserted into the program; column 7, lines 31-67, column 11, lines 44-47 and column 12, lines 5-38) to be used to identify the specific programming the user has watched (column 12, lines 40-45) for the typical benefit of providing a means to gather information which can be used for advertisers to more accurately target commercials to subscribers (column 12, line 65-column 13, line 6).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include identifier data storing means for storing identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data, as taught by Aras, for the typical benefit of providing a means to gather information which can be used for advertisers to more accurately target commercials to subscribers.

As to claim 3, while Maissel discloses a transmitting apparatus for providing digital content (Fig. 8B, headend, 340; page 30, lines 20-27), comprising:

meta information storing means for storing meta information about content data that is transmitted (Fig. 8B, headend, 340 containing EPG program schedule information to be customized; page 29, lines 3-9 and page 16, lines 24-31);

meta information schema storing means for storing a meta information schema that defines the data structure of meta information about the content data that is

transmitted (default EPG data before customization at a user site; page 20, lines 19-31, page 21, lines 1-5 and page 30, lines 20-27);

inference rule storing means for storing an inference rule defined by the data structure of meta information about data that is transmitted (inference rules based upon the user profile to customize EPG data; page 27, lines 28-31, page 28, lines 1-11 and page 30, lines 20-27); and

transmitting means for transmitting the meta information, the meta information schema, the inference rule, and the content data through a transmission path (transmitting the program guide data with the television programming; page 16, lines 12-17);

communication controlling means for communicating with a receiving apparatus (page 28, lines 25-30); and

changing means for changing the inference rule (user profile containing inference rules; page 27, lines 28-31 and page 28, lines 1-9) that has been stored in said inference rule storing means (wherein the profile, and the contained rules, are updated with viewing information; page 28, lines 25-31 and page 29, lines 1-9) corresponding to content data that has been received through said communication controlling means (television viewing information received through an upstream modem; page 28, lines 25-31), he fails to specifically disclose identifier data storing means for storing identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data.

In an analogous art, Aras discloses a content distribution system (Fig. 1; column 4, lines 41-57) wherein content identifiers associated with particular programs (column 7, lines 31-67) are stored and transmitted with the content (wherein the AVI identifiers must inherently be stored in some form to be repeatedly inserted into the program; column 7, lines 31-67, column 11, lines 44-47 and column 12, lines 5-38) to be used to identify the specific programming the user has watched (column 12, lines 40-45) for the typical benefit of providing a means to gather information which can be used for advertisers to more accurately target commercials to subscribers (column 12, line 65-column 13, line 6).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include identifier data storing means for storing identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data, as taught by Aras, for the typical benefit of providing a means to gather information which can be used for advertisers to more accurately target commercials to subscribers.

As to claim 4, Maissel and Aras disclose converting means for converting the format of the meta information into a transmission format (wherein the guide information must be formatted for transmission over the television broadcast channels; see Maissel at page 16, lines 12-17).

As to claims 5 and 23, Maissel and Aras disclose wherein content data that has been received through said communication controlling apparatus is data that represents a use history of meta information of the receiving apparatus (a user's television viewing history; see Maissel at page 28, lines 25-30).

As to claim 6, while Maissel discloses a receiving apparatus for receiving data for providing digital content, comprising:

receiving means (Fig. 2; receiving unit, 120) for receiving at least meta information and content data through a transmission path (television programs and program schedule information; page 17, lines 24-29);

meta information schema storing means for storing a meta information schema (customization instructions for EPG layout; page 20, line 19 – page 22, line 17);

profile operating means (Fig. 2; Intelligent agent, 130) for operating selection criterion for selecting meta information corresponding to the meta information schema (performing the EPG customization; page 20, lines 19-31 and page 22, line 17);

user profile storing means (Fig. 2; profile storage unit, 140) for storing a user profile generated by said profile operating means (page 18, lines 18-27);

meta information filtering means (130) for selecting and receiving meta information corresponding to the user profile (performing the EPG customization based upon a user preference profile; page 20, lines 19-31 and page 22, lines 1-17);

meta information storing means for storing meta information that has been selected and received (wherein the customized EPG must be stored before output; page 24, lines 12-18);

meta information operating means for searching and/or browsing meta information (page 31, lines 11-13);

inference rule storing means (Fig. 2; profile storage unit, 140) for storing an inference rule defined by the data structure of meta information (inference rules based upon the user profile to customize EPG data; page 27, lines 28-31 and page 28, lines 1-11);

data storing means for receiving and storing data of contents represented by the meta information that has been selected (recording programs corresponding to EPG selections; page 8, lines 10-12 and page 21, lines 21-22); and

a data operating portion for operating data that has been stored in said data storing means (operating the software controlling the system; page 15, line 29-31 and page 16, lines 1-3), he fails to specifically disclose wherein the receiving means receives identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data.

In an analogous art, Aras discloses a content distribution system (Fig. 1; column 4, lines 41-57) wherein content identifiers associated with particular programs are transmitted with the content (column 7, lines 31-67) received by a user (column 12, lines 33-45) to be used to identify the specific programming the user has watched (column 12, lines 40-45) for the typical benefit of providing a means to gather information which

can be used for advertisers to more accurately target commercials to subscribers (column 12, line 65-column 13, line 6).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include wherein the receiving means receives identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data, as taught by Aras, for the typical benefit of providing a means to gather information which can be used for advertisers to more accurately target commercials to subscribers.

As to claim 7, while Maissel discloses a receiving apparatus for receiving data for providing digital content data (110), comprising:

receiving means (Fig. 2; receiving unit, 120) for receiving at least meta information and the content data through a transmission path (television programs and program schedule information; page 17, lines 24-29);

meta information schema storing means for storing a meta information schema that defines the data structure of meta information (customization instructions for EPG layout; page 20, line 19 – page 22, line 17);

profile operating means (Fig. 2; Intelligent agent, 130) for operating selection criterion for selecting meta information corresponding to the meta information schema (performing the EPG customization; page 20, lines 19-31 and page 22, line 17);

user profile storing means (Fig. 2; profile storage unit, 140) for storing a user profile generated by said profile operating means (page 18, lines 18-27);

meta information filtering means (130) for selecting and receiving meta information corresponding to the user profile (performing the EPG customization based upon a user preference profile; page 20, lines 19-31 and page 22, lines 1-17);

meta information storing means for storing meta information that has been selected and received (wherein the customized EPG must be stored before output; page 24, lines 12-18);

meta information operating means for searching and/or browsing meta information (page 31, lines 11-13);

inference rule storing means (Fig. 2; profile storage unit, 140) for storing an inference rule about the data structure of meta information (inference rules based upon the user profile to customize EPG data; page 27, lines 28-31 and page 28, lines 1-11);

changing means for changing the structure of the meta information schema that has been stored in said meta information schema storing means and the meta information that has been stored in said meta information storing means (customizing the EPG structure based upon **current** user profiles and preferences; page 20, lines 19- page 22, lines 17) corresponding to the user profile that has been stored in said user profile storing means (page 19, lines 1-8 and page 20, lines 19-27) and to the inference rule that has been stored in said inference rule storing means (page 27, lines 28-31 and page 28, lines 1-11);

data storing means for receiving and storing data of contents represented by the meta information that has been selected (recording programs corresponding to EPG selections; page 8, lines 10-12 and page 21, lines 21-22); and

a data operating portion for operating data that has been stored in said data storing means (operating the software controlling the system; page 15, line 29-31 and page 16, lines 1-3), he fails to specifically disclose receiving identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data.

In an analogous art, Aras discloses a content distribution system (Fig. 1; column 4, lines 41-57) wherein content identifiers associated with particular programs are transmitted with the content (column 7, lines 31-67) received by a user (column 12, lines 33-45) to be used to identify the specific programming the user has watched (column 12, lines 40-45) for the typical benefit of providing a means to gather information which can be used for advertisers to more accurately target commercials to subscribers (column 12, line 65-column 13, line 6).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include receiving identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data, as taught by Aras, for the typical benefit of providing a means to gather information which can be used for advertisers to more accurately target commercials to subscribers.

As to claim 8, Maissel and Aras disclose wherein said changing means changes the meta information schema that has been stored in said meta information schema storing means and the meta information that has been stored in said meta information

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storing means corresponding to a use history of meta information of a user (a user's viewing history; see Maissel at page 28, lines 25-30).

As to claim 9, Maissel and Aras disclose wherein said changing means changes the meta information schema corresponding to a user's setup (see Maissel at page 19, lines 9-18) and stores the changed meta information schema and changed meta information to said meta information schema storing means (user profile indicating how to modify the EPG; see Maissel at page 19, lines 9-18) and said meta information storing means (the customized EPG; see Maissel at page 20, lines 19-page 22, lines 17), respectively.

As to claim 10, while Maissel discloses a transmitting and receiving apparatus having a transmitting apparatus for providing digital content (Fig. 8B, headend, 340; page 30, lines 20-27) and a receiving apparatus for receiving digital content (110),

wherein the transmitting apparatus comprises:

meta information storing means for storing meta information about content data that is transmitted (Fig. 8B, headend, 340 containing EPG program schedule information to be customized; page 29, lines 3-9 and page 16, lines 24-31);

meta information schema storing means for storing a meta information schema that defines the data structure of meta information about content data that is transmitted (default EPG data before customization at a user site; page 20, lines 19-31, page 21, lines 1-5 and page 30, lines 20-27);

inference rule storing means for storing an inference rule defined by the ata structure of meta information about content data that is transmitted (inference rules based upon the user profile to customize EPG data; page 27, lines 28-31, page 28, lines 1-11 and page 30, lines 20-27); and

transmitting means for transmitting the meta information, the meta information schema, the inference rule, and content data through a transmission path (transmitting the program guide data with the television programming; page 16, lines 12-17), and

receiving means (Fig. 2; receiving unit, 120) for receiving the meta information, the meta information schema, the inference rule and content data through a transmission path (television programs and program schedule information; page 17, lines 24-29 and page 30, lines 20-27);

meta information schema storing means the received meta information schema (default EPG schedule data before customization; page 24, lines 27-31 and page 25, lines 1-3);

profile operating means (Fig. 2; Intelligent agent, 130) for operating a selection criterion for selecting meta information corresponding to the meta information schema (performing EPG customization; page 20, lines 19-31 and page 22, line 17);

user profile storing means (Fig. 2; profile storage unit, 140) for storing a user profile generated by said profile operating means (page 18, lines 18-27);

meta information filtering means (130) for selecting and receiving meta information corresponding to the user profile (performing the EPG customization based upon a user preference profile; page 20, lines 19-31 and page 22, lines 1-17);

meta information storing means for storing meta information that has been selected and received (wherein the customized EPG must be stored before output; page 24, lines 12-18);

meta information operating means for searching and/or browsing meta information (page 31, lines 11-13);

inference rule storing means (Fig. 2; profile storage unit, 140) for storing an inference rule that has been received (inference rule contained within the user profile; page 27, lines 28-31, page 28, lines 1-11 and page 30, lines 20-27);

data storing means for receiving and storing data of content that is represented by the selected meta information (recording programs corresponding to EPG selections; page 8, lines 10-12 and page 21, lines 21-22); and

a data operating portion for operating data that has been stored in said data storing means (operating the software controlling the system; page 15, line 29-31 and page 16, lines 1-3), he fails to specifically disclose receiving identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data.

In an analogous art, Aras discloses a content distribution system (Fig. 1; column 4, lines 41-57) wherein content identifiers associated with particular programs are transmitted with the content (column 7, lines 31-67) received by a user (column 12, lines 33-45) to be used to identify the specific programming the user has watched (column 12, lines 40-45) for the typical benefit of providing a means to gather information which

can be used for advertisers to more accurately target commercials to subscribers (column 12, line 65-column 13, line 6).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include receiving identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data, as taught by Aras, for the typical benefit of providing a means to gather information which can be used for advertisers to more accurately target commercials to subscribers.

As to claim 11, while Maissel discloses a transmitting and receiving apparatus having a transmitting apparatus for providing digital content (Fig. 8A, headend, 340; page 28, lines 12-24) and a receiving apparatus for receiving digital content (110),

wherein the transmitting apparatus comprises:

meta information storing means for storing meta information about content data that is transmitted (Fig. 8A, headend, 340 containing EPG program schedule information to be customized; page 29, lines 3-9 and page 16, lines 24-31);

meta information schema storing means for storing a meta information schema that defines the data structure of meta information about data that is transmitted (the default EPG data before customization for a user site; page 20, lines 19-31, page 21, lines 1-5 and page 29, lines 1-9);

transmitting means for transmitting the meta information, the meta information schema, and content data through a transmission path (transmitting the program guide data with the television programming; page 16, lines 12-17);

communication controlling means for communicating with a receiving apparatus (page 28, lines 25-30); and

changing means for changing the structure the meta information schema that has been stored in said meta information storing means and the meta information that has been stored in said meta information storing means corresponding to content data that has been received from a receiving apparatus (preparing customized EPG data for a particular site based upon a received profile; page 28, lines 17-24 and page 29, lines 1-9), and

where the receiving apparatus comprises:

receiving means (Fig. 2; receiving unit, 120) for receiving the meta information, the meta information schema, and content data through a transmission path (television programs and program schedule information; page 17, lines 24-29 and page 30, lines 20-27);

meta information schema storing means for storing meta information schema that has been received (wherein the customized EPG data and format must be stored upon receipt; page 24, lines 27-31, page 25, lines 1-3 and page 29, lines 1-9);

profile operating means for operating a selection criterion for selecting meta information corresponding to the meta information schema (wherein viewer information is selectively stored and transmitted for later EPG customization; page 17-31);

user profile storing means (page 28, lines 17-31) for storing a user profile generated by said profile operating means (wherein the profile data must be stored before transmission to the headend; page 28, lines 17-31);

meta information filtering means for selecting and receiving meta information corresponding to the user profile (receiving the EPG customized based upon a user profile; page 20, lines 19-31, page 22, lines 1-17 and page 29, lines 1-9);

meta information storing means for storing meta information that has been selected and received (wherein the customized EPG must be stored before output; page 24, lines 12-18);

meta information operating means for searching and/or browsing meta information (page 31, lines 11-13);

data storing means for receiving and storing data of content that is represented by the selected meta information (recording programs corresponding to EPG selections; page 8, lines 10-12 and page 21, lines 21-22); and

a data operating portion for operating data that has been stored in said data storing means (operating the software controlling the system; page 15, line 29-31 and page 16, lines 1-3); and

communication controlling means for transmitting data to the transmitting apparatus (page 28, lines 25-31), he fails to specifically disclose receiving identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data.

In an analogous art, Aras discloses a content distribution system (Fig. 1; column 4, lines 41-57) wherein content identifiers associated with particular programs are transmitted with the content (column 7, lines 31-67) received by a user (column 12, lines 33-45) to be used to identify the specific programming the user has watched (column 12, lines 40-45) for the typical benefit of providing a means to gather information which can be used for advertisers to more accurately target commercials to subscribers (column 12, line 65-column 13, line 6).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include receiving identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data, as taught by Aras, for the typical benefit of providing a means to gather information which can be used for advertisers to more accurately target commercials to subscribers.

As to claim 12, while Maissel discloses a transmitting and receiving apparatus having a transmitting apparatus for providing digital content (Fig. 8B, headend, 340; page 30, lines 20-27) and a receiving apparatus for receiving digital content (110),

wherein the transmitting apparatus comprises:

meta information storing means for storing meta information about content data that is transmitted (Fig. 8B, headend, 340 containing EPG program schedule information to be customized; page 29, lines 3-9 and page 16, lines 24-31);

meta information schema storing means for storing a meta information schema that defines the data structure of meta information about data that is transmitted (default EPG data before customization at a user site; page 20, lines 19-31, page 21, lines 1-5 and page 30, lines 20-27);

inference rule storing means for storing an inference rule about the data structure of meta information about content data that is transmitted (inference rules based upon the user profile to customize EPG data; page 27, lines 28-31, page 28, lines 1-11 and page 30, lines 20-27); and

transmitting means for transmitting the meta information, the meta information schema, the inference rule, and content data through a transmission path (transmitting the program guide data with the television programming; page 16, lines 12-17), and

communication controlling means for communicating with a receiving apparatus (page 28, lines 25-30); and

changing means for changing the inference rule (user profile containing inference rules; page 27, lines 28-31 and page 28, lines 1-9) that has been stored in said inference rule storing means (wherein the profile, and the contained rules, are updated with viewing information; page 28, lines 25-31 and page 29, lines 1-9) corresponding to content data that has been received through said communication controlling means (television viewing information received through an upstream modem; page 28, lines 25-31); and

wherein the receiving apparatus comprises:

receiving means (Fig. 2; receiving unit, 120) for receiving the meta information, the meta information schema, the inference rule and contents data through a transmission path (television programs and program schedule information; page 17, lines 24-29 and page 30, lines 20-27);

meta information schema storing means for storing the meta information schema that has been received (default EPG schedule data before customization; page 24, lines 27-31 and page 25, lines 1-3);

profile operating means (Fig. 2; Intelligent agent, 130) for operating a selection criterion for selecting meta information corresponding to the meta information schema (performing EPG customization; page 20, lines 19-31 and page 22, lines 1-17);

user profile storing means (Fig. 2; profile storage unit, 140) for storing a user profile generated by said profile operating means (page 18, lines 18-27);

meta information filtering means (130) for selecting and receiving meta information corresponding to the user profile (performing the EPG customization based upon a user preference profile; page 20, lines 19-31 and page 22, line 17);

meta information storing means for storing meta information that has been selected and received (wherein the customized EPG must be stored before output; page 24, lines 12-18);

meta information operating means for searching and/or browsing meta information (page 31, lines 11-13);

inference rule storing means (Fig. 2; profile storage unit, 140) for storing an inference rule that has been received (inference rule contained within the user profile; page 27, lines 28-31, page 28, lines 1-11 and page 30, lines 20-27);

data storing means for receiving and storing data of content that is represented by the selected meta information (recording programs corresponding to EPG selections; page 8, lines 10-12 and page 21, lines 21-22);

a data operating portion for operating data that has been stored in said data storing means (operating the software controlling the system; page 15, line 29-31 and page 16, lines 1-3); and

communication controlling means for transmitting data to the transmitting apparatus (page 28, lines 25-31), he fails to specifically disclose receiving identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data.

In an analogous art, Aras discloses a content distribution system (Fig. 1; column 4, lines 41-57) wherein content identifiers associated with particular programs are transmitted with the content (column 7, lines 31-67) received by a user (column 12, lines 33-45) to be used to identify the specific programming the user has watched (column 12, lines 40-45) for the typical benefit of providing a means to gather information which can be used for advertisers to more accurately target commercials to subscribers (column 12, line 65-column 13, line 6).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include receiving identifier data

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associated with a particular portion of the content data that is adapted to distinguish a segment of content data, as taught by Aras, for the typical benefit of providing a means to gather information which can be used for advertisers to more accurately target commercials to subscribers.

As to claim 13, while Maissel discloses a transmitting and receiving apparatus having a transmitting apparatus for providing digital content (Fig. 8B, headend, 340; page 30, lines 20-27) and a receiving apparatus for receiving digital content (110),

wherein the transmitting apparatus comprises:

meta information storing means for storing meta information about content data that is transmitted (Fig. 8B, headend, 340 containing EPG program schedule information to be customized; page 29, lines 3-9 and page 16, lines 24-31);

meta information schema storing means for storing a meta information schema that defines the data structure of meta information about content data that is transmitted (default EPG data before customization at a user site; page 20, lines 19-31, page 21, lines 1-5 and page 30, lines 20-27);

inference rule storing means for storing an inference rule about the data structure of meta information about content data that is transmitted (inference rules based upon the user profile to customize EPG data; page 27, lines 28-31, page 28, lines 1-11 and page 30, lines 20-27); and

transmitting means for transmitting the meta information, the meta information schema, the inference rule, and content data through a transmission path (transmitting the program guide data with the television programming; page 16, lines 12-17), and wherein the receiving apparatus comprises:

receiving means (Fig. 2; receiving unit, 120) for receiving the meta information, the meta information schema, the inference rule and content data through a transmission path (television programs and program schedule information; page 17, lines 24-29 and page 30, lines 20-27);

meta information schema storing means for storing the meta information schema that has been received (default EPG schedule data before customization; page 24, lines 27-31 and page 25, lines 1-3);

profile operating means (Fig. 2; Intelligent agent, 130) for operating a selection criterion for selecting meta information corresponding to the meta information schema (performing EPG customization; page 20, lines 19-31 and page 22, line 17);

user profile storing means (Fig. 2; profile storage unit, 140) for storing a user profile generated by said profile operating means (page 18, lines 18-27);

meta information filtering means (130) for selecting and receiving meta information corresponding to the user profile (performing the EPG customization based upon a user preference profile; page 20, lines 19-31 and page 22, line 17);

meta information storing means for storing meta information that has been selected and received (wherein the customized EPG must be stored before output; page 24, lines 12-18);

meta information operating means for searching and/or browsing meta information (page 31, lines 11-13);

inference rule storing means (Fig. 2; profile storage unit, 140) for storing an inference rule that has been received (inference rule contained within the user profile; page 27, lines 28-31, page 28, lines 1-11 and page 30, lines 20-27);

changing means for changing the structure of the meta information schema that has been stored in said meta information schema storing means and the meta information that has been stored in said meta information storing means (customizing the EPG structure based upon **current** user profiles and preferences; page 20, lines 19- page 22, lines 17) corresponding to the user profile that has been stored in said user profile storing means (page 19, lines 1-8 and page 20, lines 19-27) and to the inference rule that has been stored in said inference rule storing means (page 27, lines 28-31 nad page 28, lines 1-11);

data storing means for receiving and storing data of contents that is represented by the selected meta information (recording programs corresponding to EPG selections; page 8, lines 10-12 and page 21, lines 21-22); and

a data operating portion for operating data that has been stored in said data storing means (operating the software controlling the system; page 15, line 29-31 and page 16, lines 1-3), he fails to specifically disclose receiving identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data.

In an analogous art, Aras discloses a content distribution system (Fig. 1; column 4, lines 41-57) wherein content identifiers associated with particular programs are transmitted with the content (column 7, lines 31-67) received by a user (column 12, lines 33-45) to be used to identify the specific programming the user has watched (column 12, lines 40-45) for the typical benefit of providing a means to gather information which can be used for advertisers to more accurately target commercials to subscribers (column 12, line 65-column 13, line 6).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include receiving identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data, as taught by Aras, for the typical benefit of providing a means to gather information which can be used for advertisers to more accurately target commercials to subscribers.

As to claim 14, while Maissel discloses a transmitting method for providing digital content, comprising the steps of:

when meta information about content data that is transmitted (transmitting the program guide data with the television programming; page 16, lines 12-17), a meta information schema that defines the data structure of the meta information (default EPG data before customization at a user site; page 20, lines 19-31, page 21, lines 1-5 and page 30, lines 20-27), and content data are transmitted through a transmission path

(transmitting the program guide data with the television programming; page 16, lines 12-17),

changing the structure the meta information schema and the meta information corresponding to data that has been received from a receiving apparatus (preparing customized EPG data for a particular site based upon a received profile; page 28, lines 17-24 and page 29, lines 1-9) and transmitting the changed data (page 29, lines 4-13), he fails to specifically disclose transmitting identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data.

In an analogous art, Aras discloses a content distribution system (Fig. 1; column 4, lines 41-57) wherein content identifiers associated with particular programs are transmitted with the content (column 7, lines 31-67) to be used to identify the specific programming the user has watched (column 12, lines 40-45) for the typical benefit of providing a means to gather information which can be used for advertisers to more accurately target commercials to subscribers (column 12, line 65-column 13, line 6).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include transmitting identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data, as taught by Aras, for the typical benefit of providing a means to gather information which can be used for advertisers to more accurately target commercials to subscribers.

As to claim 15, while Maissel discloses a transmitting method for providing digital content, comprising the steps of:

when meta information about content data that is transmitted (transmitting the program guide data with the television programming; page 16, lines 12-17), a meta information schema that defines the data structure of the meta information (default EPG data before customization at a user site; page 20, lines 19-31, page 21, lines 1-5 and page 30, lines 20-27), and

content data are transmitted through a transmission path (transmitting the program guide data with the television programming; page 16, lines 12-17),

changing the inference rule corresponding to content data that has been received from a receiving apparatus (wherein the profile, and the contained rules, are updated with viewing information; page 28, lines 25-31 and page 29, lines 1-9) and transmitting the changed data (page 29, lines 4-13), he fails to specifically disclose transmitting identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data.

In an analogous art, Aras discloses a content distribution system (Fig. 1; column 4, lines 41-57) wherein content identifiers associated with particular programs are transmitted with the content (column 7, lines 31-67) to be used to identify the specific programming the user has watched (column 12, lines 40-45) for the typical benefit of providing a means to gather information which can be used for advertisers to more accurately target commercials to subscribers (column 12, line 65-column 13, line 6).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include transmitting identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data, as taught by Aras, for the typical benefit of providing a means to gather information which can be used for advertisers to more accurately target commercials to subscribers.

As to claims 16 and 24, Maissel and Aras disclose receiving a meta information use history from the receiving apparatus (see Maissel at page 28, lines 25-31) and transmitting a meta information schema, meta information and an inference rule that have been changed so that they have respective data structures corresponding to the meta information use history (transmitting the customized EPG; see Maissel at page 29, lines 1-9).

As to claim 17, while Maissel discloses a receiving method for receiving data for providing digital content, comprising the steps of:

storing a meta information schema that defines the data structure of meta information (customization instructions for EPG layout; page 20, line 19 – page 22, line 17);

storing meta information that has been selected and received (wherein the customized EPG must be stored before output; page 24, lines 12-18);

searching and/or browsing the meta information (page 31, lines 11-13); and

changing the structure of the meta information schema and meta information that has been stored (customizing the EPG structure based upon **current** user profiles and preferences; page 20, lines 19-page 22, lines 17) corresponding to a user profile (page 19, lines 1-8 and page 20, lines 19-27) and to an inference rule (page 27, lines 28-31 and page 28, lines 1-11), he fails to specifically disclose storing identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data.

In an analogous art, Aras discloses a content distribution system (Fig. 1; column 4, lines 41-57) wherein content identifiers associated with particular programs are transmitted with the content (column 7, lines 31-67) and stored at the user receiver (column 14, lines 1-28 and column 12, lines 40-45) to be used to identify the specific programming the user has watched (column 12, lines 40-45) for the typical benefit of providing a means to gather information which can be used for advertisers to more accurately target commercials to subscribers (column 12, line 65-column 13, line 6).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include storing identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data, as taught by Aras, for the typical benefit of providing a means to gather information which can be used for advertisers to more accurately target commercials to subscribers.

As to claim 18, while Maissel discloses a transmitting and receiving method for providing digital content and receiving digital content, comprising the steps of:

transmitting meta information about content data that is transmitted (transmitting the program guide data with the television programming; page 16, lines 12-17), a meta information schema that defines the data structure of the meta information (default EPG data before customization at a user site; page 20, lines 19-31, page 21, lines 1-5 and page 30, lines 20-27), and content data through a transmission path (transmitting the program guide data with the television programming; page 16, lines 12-17),

changing the structure of the meta information schema that is transmitted corresponding to content data that has been received from a receiving apparatus (preparing customized EPG data for a particular site based upon a received profile; page 28, lines 17-24 and page 29, lines 1-9);

storing a meta information schema that defines the data structure of the meta information that has been received on a receiving side (wherein the customized EPG must be stored before output; page 24, lines 12-18);

storing the meta information that has been selected and received (wherein the customized EPG must be stored before output; page 24, lines 12-18); and

searching and/or browsing the meta information (page 31, lines 11-13), he fails to specifically disclose transmitting identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data.

In an analogous art, Aras discloses a content distribution system (Fig. 1; column 4, lines 41-57) wherein content identifiers associated with particular programs are

transmitted with the content (column 7, lines 31-67) to be used to identify the specific programming the user has watched (column 12, lines 40-45) for the typical benefit of providing a means to gather information which can be used for advertisers to more accurately target commercials to subscribers (column 12, line 65-column 13, line 6).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include transmitting identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data, as taught by Aras, for the typical benefit of providing a means to gather information which can be used for advertisers to more accurately target commercials to subscribers.

As to claim 19, while Maissel discloses a transmitting and receiving method for providing digital content and receiving digital content, comprising the steps of:

transmitting meta information about content data that is transmitted (transmitting the program guide data with the television programming; page 16, lines 12-17), a meta information schema that defines the data structure of the meta information (default EPG data before customization at a user site; page 20, lines 19-31, page 21, lines 1-5 and page 30, lines 20-27), an inference rule (page 28, lines 1-9 and page 30, lines 20-27) and content data through a transmission path (transmitting the program guide data with the television programming; page 16, lines 12-17),

changing the inference rule that is transmitted (wherein the profile, and the contained rules, are updated with viewing information; page 28, lines 25-31 and page

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29, lines 1-9) corresponding to data that has been received from a receiving apparatus (television viewing information received through an upstream modem; page 28, lines 25-31);

storing a meta information schema that defines the data structure of meta information that has been received on a receiving side (customization instructions for EPG layout; page 20, line 19 – page 22, line 17);

storing meta information that has been selected and received (wherein the customized EPG must be stored before output; page 24, lines 12-18); and

searching and/or browsing the meta information (page 31, lines 11-13), he fails to specifically disclose transmitting identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data.

In an analogous art, Aras discloses a content distribution system (Fig. 1; column 4, lines 41-57) wherein content identifiers associated with particular programs are transmitted with the content (column 7, lines 31-67) to be used to identify the specific programming the user has watched (column 12, lines 40-45) for the typical benefit of providing a means to gather information which can be used for advertisers to more accurately target commercials to subscribers (column 12, line 65-column 13, line 6).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include transmitting identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data, as taught by Aras, for the typical benefit of providing a means

to gather information which can be used for advertisers to more accurately target commercials to subscribers.

As to claim 20, while Maissel discloses a transmitting and receiving method for providing digital content and receiving digital content, comprising the steps of:

transmitting meta information about content data that is transmitted (transmitting the program guide data with the television programming; page 16, lines 12-17), a meta information schema that defines the data structure of the meta information (default EPG data before customization at a user site; page 20, lines 19-31, page 21, lines 1-5 and page 30, lines 20-27), an inference rule (page 28, lines 1-9 and page 30, lines 20-27) and content data through a transmission path (transmitting the program guide data with the television programming; page 16, lines 12-17),

storing a meta information schema that defines the data structure of meta information that has been received on a receiving side (customization instructions for EPG layout; page 20, line 19 – page 22, line 17);

storing meta information that has been selected and received (wherein the customized EPG must be stored before output; page 24, lines 12-18); and

changing the structure of the meta information schema and meta information that has been stored (customizing the EPG structure based upon **current** user profiles and preferences; page 20, lines 19-page 22, lines 17) corresponding to a user profile (page 19, lines 1-8 and page 20, lines 19-27) and to an inference rule (page 27, lines 28-31 and page 28, lines 1-11), he fails to specifically disclose transmitting identifier data

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associated with a particular portion of the content data that is adapted to distinguish a segment of content data.

In an analogous art, Aras discloses a content distribution system (Fig. 1; column 4, lines 41-57) wherein content identifiers associated with particular programs are transmitted with the content (column 7, lines 31-67) to be used to identify the specific programming the user has watched (column 12, lines 40-45) for the typical benefit of providing a means to gather information which can be used for advertisers to more accurately target commercials to subscribers (column 12, line 65-column 13, line 6).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Maissel's system to include transmitting identifier data associated with a particular portion of the content data that is adapted to distinguish a segment of content data, as taught by Aras, for the typical benefit of providing a means to gather information which can be used for advertisers to more accurately target commercials to subscribers.

As to claims 21 and 22, Maissel and Aras disclose converting means for converting the format of the meta information into a transmission format (wherein the guide information must be formatted for transmission over the television broadcast channels; see Maissel at page 16, lines 12-17).

Response to Arguments

3. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

5. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Sheleheda whose telephone number is (571) 272-7357. The examiner can normally be reached on 9:00-5:30.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James Sheleheda
Patent Examiner
Art Unit 2617

JS


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PRIMARY EXAMINER